

ABSTRACT

The liveness of routing protocols can be determined using a mechanism to aggregate liveness information for the protocols. The ability of an interface to 5 send and receive packets and the forwarding capability of an interface can also be determined using this mechanism. Since liveness information for multiple protocols, the liveness of interfaces, the forwarding capability of interfaces, or both, may be aggregated in a message, the message can be sent more often than could individual messages for each of the multiple protocols. This allows 10 fast detection of failures, and sending connectivity messages for the individual protocols, such as neighbor “hellos,” to be sent less often.